

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Norco Refinery
Motiva Enterprises LLC
Logistics II
Norco, St. Charles Parish, Louisiana
Agency Interest Number: 1406
Activity Number: PER20090010
Draft Permits 2912-V2**

I. *APPLICANT:*

Company:

Motiva Enterprises LLC
Post Office Box 10
Norco, Louisiana 70079

Facility:

Norco Refinery
Residual Catalytic Cracking Unit
15536 River Road, Norco, St. Charles Parish, Louisiana
Approximate Coordinates: Latitude 29 deg., 59 min., 58 sec. and Longitude 90 deg., 24 min., 13 sec., Zone 15

Responsible Official:

Ms. Anne-Marie Ainsworth, General Manager

II. *FACILITY AND CURRENT PERMIT STATUS*

Motiva Enterprises (Motiva), LLC owns and operates a petroleum refinery, Norco Refinery, in Norco, St. Charles Parish, Louisiana. The Norco Refinery process crude oil, natural gas condensate, and partially refined products such as gas oil, to produce liquefied petroleum gas, ethylene, propylene, chemical products, finished gasoline, diesel, aviation fuel, heating oils, residuals, petroleum coke, and sulfur.

Historically, this site consisted of the Shell Norco Refining Company and Shell Chemical Company (Shell). In 1998, Shell Oil Company, Texaco Inc. and Saudi Aramco formed Motiva Enterprises (Motiva), LLC, a joint venture combining major elements of the three companies' eastern and Gulf Coast refining and marketing businesses. Based on new business ventures Shell Chemical Company and Motiva are viewed as separate sites. Motiva is splitting the old permits and is now permitting all the units and equipment now being operated under the Norco Refinery. This statement of basis is for the Residual Catalytic Cracking Unit (RCCU) permit modification.

The facility is classified under "Petroleum Refineries" for which there are established standards in New Source Performance Standards (NSPS), Subpart J – Petroleum Refineries. Motiva Enterprises LLC is also subject to NSPS, 40 CFR 60, Subpart GGG – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries; Subpart QQQ – Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater System; 40 CFR 61, Subpart FF – National Emissions Standard for Benzene Waste Operations; and 40 CFR 63, Subpart CC – National Emission Standards for

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Hazardous Air Pollutants From Petroleum Refineries. The refinery as whole is a major source of toxic air pollutants and must comply with all the applicable requirements of LAC 33:III.Chapter 51 – Comprehensive Toxics Air Pollutant Emission Control Program and the Louisiana Refinery MACT Determination July 26, 1994 with some minor changes as approved by LDEQ.

Initial/Modified Title V Part 70 permits that were issued by the department include:

<u>Permit #</u>	<u>Units or Sources</u>	<u>Date Issued</u>
2501-V1	Coker, Distillation, and Kerosene Units	1/30/2009
2502-V2	Catalytic Reformers I and 2, Naphtha Hydrotreater, and Diesel Hydrotreater Units	8/8/2007
2510-V1	Logistics, Flares and Shared Sources	11/18/2003
2600-V1	Alkylation Unit	1/2/2008
2601-V1	Methyl Tertiary Butyl Ether Unit	4/26/2009
2602-V1	Residue Catalytic Cracking Unit	4/9/2009
2628-V1	Hydrogen Plant	1/10/2005
2629-V2	Hydrocracker Unit	3/25/2008
2794-V2	Low Sulfur Gasoline Hydrotreater Unit	1/2/2008
2902-V0	Sulfur Plant No. 2	12/20/2004
2903-V0	Sulfur Plant No. 3	12/20/2004
2912-V0	Logistic II Plant	9/4/2008
2913-V0	Logistic I	4/16/2009

Initial Title V Part 70 General permits issued by the department include:

<u>Permit #</u>	<u>Units or Sources</u>	<u>Date Issued</u>
3075-V0	Tank 514	4/28/2009

Renewal/ Modification permits under review by the department include:

<u>Permit #</u>	<u>Units or Sources</u>	<u>Date Issued</u>
2902-V0	Sulfur Plant No. 2	Under Review
2903-V0	Sulfur Plant No. 3	Under Review
2628-V2	Hydrogen Plant	Under Review

Prevention of Significant Deterioration permits issued by the department includes:

<u>Permit #</u>	<u>Units or Sources</u>	<u>Date Issued</u>
PSD-LA-618	-	9/26/1997
PSD-LA-671	-	9/15/2002
PSD-LA-730		3/25/2008

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III. *PROPOSED PERMIT / PROJECT INFORMATION*

Proposed Permits

This review was initiated by an application and Emission Inventory Questionnaire (EIQ) dated May 13, 2009 for logistics II Unit equipment only. Additional information as of July 30 was also received.

Project description

This permit comprise of the storage tanks, distribution piping system, marine vapor recovery, wastewater treatment, oil water separation, flares, and equipment fugitives (fugitives are included in Logistics I Permit No. 2913-V0 or current permit).

Motiva Enterprises, LLC proposes to modify the Logistics II Unit permit as follows:

1. Incorporate the emissions changes due to the inclusion of Gasoline Hydrotreater (GHT) Project under taken by Shell Norco Chemical Plant-East Site;
2. Incorporate the Marine Vapor Recovery metallurgy project for the electric driven compressors in the system;
3. Update the emissions and storage flexibility for the tanks affected by the GHT Project (See TABLE A); and
4. Include two storage tanks (F-513 and F-514) permitted in Permit No. 2601-V1 and 3075-V0 both dated April 28, 2009;
5. Update tanks (F-513, F-514, F-462, F-476, D-413, D-422, W437, and W-438) emissions based on the material stored, temperature of the material stored and the construction of the tank (deck fittings, rim seals, etc.);
6. Incorporate an existing activity for RON/MON octane testing engines, Emission Point 5061-09 which were inadvertently not permitted earlier;
7. Update Insignificant Activity List based on current information and operation changes;
8. Update General Condition XVII List based on current information and operation changes;
9. Remove from the inventory a Tank XC-518, Emission Point 5047-06, which was permitted for construction under Part 70 Permit No. 3054-V0 dated March 13, 2007. This tank was never built;
10. Update the specific requirements based on new regulations promulgated or determinations made since the issuance of the current permit; and
11. Updated the storage tank cleaning, Emission Point 5050-06 for the next five years.

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The facility is incorporating changes due to the GHT Project in order to meet the Environmental Protection Agency (EPA) Mobile Source Air Toxics (MSAT) Phase 2 final rule requirements dated February 9, 2007. This rule will limit the benzene content of the gasoline produced at the facility to an annual average of 0.62 percent by volume.

Under the GHT proposal Motiva Enterprises LLC will route reformat produced by Motiva to Shell Norco Chemical Plant-East Site. After fractionation and benzene reduction Shell will send back the low benzene C5-/C7+ stream to Motiva Enterprises LLC along with low benzene C5 gasoline stream. Motiva will experience changes in material and throughput from the storage tanks and the Marine Vapor Recovery (MVR) System.

Permitted emissions from the Logistics II in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	7.65	8.23	+ 0.58
SO ₂	14.09	14.19	+ 0.10
NO _x	76.85	84.13	+ 7.28
CO	314.05	338.34	+ 24.29
VOC*	263.47	274.76	+ 11.29

IV. **REGULATORY ANALYSIS**

The applicability of the appropriate regulations is straightforward and is provided in the Facility Specific Requirements Section of the proposed permits. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms conditions and standards are provided in the Facility Specific Requirements Section of the proposed permits.

National Emission Standards for Hazardous Air Pollutants: NESHAP From Benzene Waste Operations (BWON)

Chemical manufacturing plants, coke by-product plant and petroleum refineries are potentially subject to the provisions of BWON. Oil water separators, individual drain systems, stream stripping units, and other equipment that meet the definition of a waste management unit are subject to BWON. A waste management unit is defined as a piece of equipment used in the handling, storage, treatment, or disposal of waste. A waste is any material resulting from industrial operations that is discarded or accumulated, stored, or treated prior to discarded, recycled, or discharged. BWON specifically lists the following

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waste streams to which this regulation do not apply: 1) Waste in the form of gases or vapors that is emitted from process fluids; 2) Waste that is contained in a segregated storm water sewer system; and 3) Any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system.

The facility generates a total annual benzene (TAB) quantity of 10 megagrams per year or greater. The facility elects to take the 6 megagrams per year option as per the requirements of 40 CFR 63.342(e) where the total uncontrolled benzene quantity for the wastes shall not be greater than 6 megagrams per year.

National Emission Standards for Hazardous Air Pollutants: NESHAP From Synthetic Organic Chemical Manufacturing Industry

A chemical manufacturing process unit (CMPU) that manufactured one or more SOCMIs chemicals listed in Table 1 of 40 CFR 63, Subpart F and that uses as a reactant or manufactures as a product, or co-product, one or more of the organic hazardous air pollutants listed in Table 2 of 40 CFR 63, Subpart F is potentially subject to the SOCMIs HON. Some of the Chemical Manufacturing Process Units (CMPUs), located elsewhere in the refinery, may generate maintenance wastewater and Group 2 process wastewater and route it to the WWTP. Therefore, the WWTP is subject to Subpart F Maintenance Wastewater requirements and Subpart G Group 2 Process Wastewater requirements.

National Emission Standards for Hazardous Air Pollutants: NESHAP From Petroleum Refineries

Petroleum refining process unit that contains or contacts one or more of the HAPs listed in Table 1 of Subpart CC is potentially subject to RMACT.

There are fugitive components within the units in organic HAP service. Therefore, the units are subject to the equipment leak provisions of this rule and Motiva demonstrates compliance by complying with the provisions of 40 CFR 63.648(c), the modified HON option.

A process wastewater stream in a refining process unit that contains one or more of the HAPs listed in Table 1 of Subpart CC are potentially subject to RMACT. Wastewater components within the process units are associated with petroleum refining process units. Therefore, the wastewater provisions of the RMACT are applicable. Group 2 streams are not subject to any control, monitoring, recordkeeping, or reporting requirements under RMACT. Group 1 wastewater streams must demonstrate compliance with RMACT by complying with NESHAP Part 61 Subpart FF, BWON.

The units contain tanks that receive maintenance wastewater and wastewater streams that are subject to the wastewater provisions of RMACT. When determining whether a tank must comply with the storage vessel provisions or the wastewater provisions of the RMACT, the function of the tank (whether the tank stores a waste or a product for use or

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reuse) is used as the basis of the determination. As defined in RMACT Subpart CC, a wastewater tank is not a storage vessel. Notably, the units contain Group 2 wastewater tanks. Group 2 wastewater tanks are not subject to any control, monitoring, recordkeeping, or reporting requirements under RMACT.

The No. 1 Crude Unit contains tanks that receive maintenance wastewater and wastewater streams that are subject to the wastewater provisions of RMACT. When determining whether a tank must comply with the storage vessel provisions or the wastewater provisions of the RMACT, the function of the tank (whether the tank stores a waste or a product for use or reuse) is used as the basis of the determination. As defined in RMACT Subpart CC, a wastewater tank is not a storage vessel. Notably, the No. 1 Coker Unit contains Group 2 wastewater tanks. Group 2 wastewater tanks are not subject to any control, monitoring, recordkeeping, or reporting requirements under RMACT.

National Emission Standards for Hazardous Air Pollutants: NESHAP From Synthetic Organic Chemical Manufacturing Industry

The petroleum refining process unit that contains or contacts one or more of the HAPs listed in Table 1 of Subpart CC is potentially subject to RMACT. Leaks from equipment in organic HAP service that are located in a petroleum refining process unit are subject to RMACT. Equipment in organic HAP service in the WWTP Area is subject to the RMACT. CRLLC demonstrates compliance with this rule by complying with the provisions of 40 CFR 63.648. A process wastewater stream in a petroleum refining process unit that contains one or more of the HAPs listed in Table 1 of Subpart CC are potentially subject to RMACT. The WWTP receives process wastewater streams and, therefore, the wastewater provisions of the RMACT are applicable to the WWTP Area.

Notably, the benzene concentration of the wastewater streams generated in the WWTP Areas is less than 10 ppmw. Therefore, the wastewater stream can be classified as a Group 2 stream. There are no controls, monitoring, recordkeeping, or reporting requirements for Group 2 wastewater streams. However, the Vacuum Trucks within the WWTP may load and transport process wastewater streams from refinery units that can be classified as Group 1 streams. Per 40 CFR 63.647(a), Group 1 wastewater streams must demonstrate compliance with RMACT by complying with NESHAP Part 61 Subpart FF, BWON.

The WWTP area contains tanks that receive maintenance wastewater and wastewater streams that are subject to the wastewater provisions of RMACT. When determining whether a tank must comply with the storage vessel provisions or the wastewater provisions of the RMACT, the function of the tank (whether the tank stores a waste or a product for use or reuse) is used as the basis of the determination. As defined in RMACT Subpart CC, a wastewater tank is not a storage vessel. Notable, the WWTP area contains Group 2 wastewater tanks. Group 2 wastewater tanks are not subject to any requirements under RMACT.

The equipment leak provisions of Subpart CC apply to all equipment that operates in

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organic HAP service. Equipment includes all pumps, compressors, pressure relief devices, sampling connections, open-ended valves or lines, valves, flanges and other connectors, product accumulator vessels, and control devices, or systems required by Subpart CC. However, there are no fugitive components within the WWTP Area in organic HAP service. Therefore, the WWTP Area is not subject to the equipment leak provisions of this rule.

Prevention of Significant Deterioration Applicability

Estimated emissions increases from the GHT Project including the startup/shutdown operation based on actual to potential for the four tanks and the MVR due to service and throughput change in tons per year is as follows:

<u>Pollutant</u>	<u>2006/2007 Average</u>	<u>Post GHT Project</u>	<u>Total Emissions</u>
	<u>Emissions</u>	<u>Emissions</u>	<u>Increase*</u>
VOC	9.24	47.63	38.39

* No credit is being taken for any reductions

Prevention of Significant Deterioration review is not required as the net emissions increase due to the GHT Project is less than the PSD significance level for the criteria pollutants as shown in the table above.

The MVR system at the refinery includes four liquid ring electric driven compressors that transport the vapors collected from the loading of barges and ships at the wharf to the flare (Emission Point 5-89 A&B). The facility will upgrade (metallurgy) three compressors and the fourth will be reconstructed with new and existing parts. This change in method of operation and reconstruction has been determined to be Title I modification and considered a separate project from the GHT Project. The compressors will now be regulated under NSPS, 40 CFR 60, Subpart GGGa – standards of Performance for Equipment Leaks of VOC in Petroleum refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006. MVR system upgrade is a stand alone project and is not dependant on the GHT Project.

Estimated emissions increases from the MVR system compressors upgrade including the startup/shutdown operation based on actual to potential in tons per year is as follows:

<u>Pollutant</u>	<u>2006/2007 Average</u>	<u>Post MVR Upgrade</u>	<u>Change</u>
	<u>Emissions (a)</u>	<u>Emissions (b)</u>	
PM ₁₀	0.18	2.06	+ 1.88
SO ₂	0.01	0.11	+ 0.10

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<u>Pollutant</u>	<u>2006/2007 Average Emissions (a)</u>	<u>Post MVR Upgrade Emissions (b)</u>	<u>Change</u>
NO _x	1.64	18.81	+ 17.17
CO	8.95	102.33	+ 93.38

Prevention of Significant Deterioration review is not required as the net emissions increase due to the MVR system upgrade is less than the PSD significance level for the criteria pollutants as shown in the table above. The change in Voc emissions is negligible.

Air Modeling Analysis

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

Comprehensive Toxic Air Pollutant Control Program-Chapter 51

Toxic air pollutant emissions from fugitives must be controlled to a degree that constitutes MACT. The units comply with all applicable provisions of the Federal HAP requirements and the Louisiana Air Toxics Program.

Maximum Achievable Control Technology (MACT) requirements

The Louisiana Air Toxics Program (LA MACT) requires a major source emitting any Class I or II pollutant at a rate that exceeds the minimum emission rate for that pollutant to demonstrate compliance with the Maximum Achievable Control Technology (MACT) standards. Additionally, the Louisiana Air Toxics Program requires a major source emitting any Class I, II, or III toxic air pollutant greater than the minimum emission rate for that pollutant to determine its status of compliance with the applicable ambient air standard (AAS) defined for the pollutant.

The requirements of the LA MACT apply to the fugitive components and shall show compliance by complying with the LDAR approved under Federal and State requirements.

General Condition XVII Activities

Motiva is requesting General Condition XVII Activities under this permit. See SECTION VIII of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. See SECTION IX under the proposed permit.

V. PERMIT SHIELDS

A permit shield was not requested.

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VI. PERIODIC MONITORING

The facility is subject the General Provisions of NSPS, 40 CFR 60, Subpart A; and NESHAP, 40 CFR 63, Subpart A which deals with monitoring, notification, recordkeeping, reporting, and control device requirements. In addition, the facility complies with all the monitoring, recordkeeping and reporting requirements of individual subparts like 40 CFR 60 Subpart Ja, Subpart GGG, Subpart GGGa; and 40 CFR 64, Compliance Assurance Monitoring (CAM).

The Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the SPECIFIC REQUIREMENTS section of the proposed permits.

VII. APPLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS

See the Table below:

VIII. STREAMLINED REQUIREMENTS

The facility shall comply with NSPS, Subpart GGG in lieu of NESHAP, Subpart F and H, Subpart CC and LAC 33:III.2121 (as approved by LDEQ) for fugitive emission sources except connectors from the entire facility. The facility shall comply with Louisiana Refinery MACT Determination July 26, 1994 for all connectors with a leak definition of 500 ppm. See SPECIFIC REQUIREMENTS section of the proposed permit in Logistics I. The fugitive emission sources for Logistics I and II (combined) are permitted under Logistics I proposed permit.

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I. XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Status	Citation	Explanation
Unit Wide	Emission Standards for Sulfur Dioxide	Does not apply	LAC 33:III.1502.A.3	No single point source emits more than the threshold
	Compliance Assurance Monitoring	Does not apply	40 CFR 64	Emission sources do not emit more than 100 tons without controls
EQT153 and 154 1037-95 and 1038-95, Tanks F-410 and 411	NESHAP, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries	Does not apply	40 CFR 63.641	Does not meet the definition of a Storage Vessel
	NESHAP, Subpart EEEE – National Emission Standards for Hazardous Pollutants : Organic Liquid Distribution (Non-Gasoline)	Does not apply	40 CFR 63.2406	Does not meet the definition of an organic liquid
EQT155 thru 160, and 181 1073-95, 1082-95, 1083-95, 1086-95, 1087-95, 1088-95, and 1089-95, and 1088-95, Tanks F-492, W-427, W-428, W-406, W-410, W-412, and W-411	Control of Emissions of Organic Compounds – Storage of Volatile Organic Compounds	Does not apply	LAC 33:III.2103.A	Maximum operating true vapor pressure less than 1.5 psia
EQT158 thru 162, 165 thru 167, 169, 175 and 181 1086-95, 1087-95, 1089-95, 1204-95, 1213-95, 1256-95, 1257-95, 1258-95, 1265-95 5046-06 and 1088-95, Tanks	NESHAP, Subpart YY – National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards	Does not apply	40 CFR 63.1103(e)(iii)	Complies with the requirements of NESHAP, 40 CFR 63, Subpart CC
EQT165, 166, and 175 1256-95, 1257-95, and 5046-06 Tanks D-413, D-422, and F-517	NSPS, Subpart QQQ, 40 CFR 60.690	Does not apply	40 CFR 60.692-3(d)	Complies with the requirements of NSPS, 40 CFR 60, Subpart Kb

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ID No:	Requirement	Status	Citation	Explanation
EQT168 and 182 1259-95 and 1260-95, Tanks W-437 and W-438	NSPS, Subpart Kb – Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Does not apply	40 CFR 60.110b(a)	Capacity less than the threshold and not constructed, reconstructed, or modified after July 23, 1984
EQT172 3307-95, Loading Wharf (Uncontrolled)	NESHAP, Subpart Y – National Emission Standards for Marine Tank Vessel Loading Operations	Exempt	40 CFR .560(d)(1)	True vapor pressure at loading conditions less than 1.5 psia
	NESHAP, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries	Does not apply	40 CFR 63.640©(6)	Does not meet the applicability of 40 CFR 63, Subpart Y
	Control of Emissions of Organic Compounds – Marine Vapor Recovery	Exempt	LAC 33:III.2108.A	Maximum operating true vapor pressure less than 1.5 psia
	Emission Standards for Sulfur Dioxide	Does not apply	LAC 33:III.1502.A.3	Emits less than 5 tons per year
EQT174 5045-02, Storm Water Impoundment Basin Diesel Pumps	Comprehensive Toxic Air Pollutant Emission Control Program	Exempt	LAC 33:III.5105.B.3 a	Engines combust diesel, Group 1 virgin fossil fuel
	NSPS, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Does not apply	40 CFR 60.	P-3100 and P-3102: Engines ordered and installed before July 11, 2005

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ID No:	Requirement	Status	Citation	Explanation
EQT174 5045-02, Storm Water Impoundment Basin Diesel Pumps (Continued)	NESHAP, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Does not apply	40 CFR 63.6590(b)(3)	P-3100 and P-3102: Existing engines
EQT179 and 180 5-89A&B and 9-84, MVR Stacks and West Ops Ground Flare	Emission Standards for Sulfur Dioxide	Does not apply	LAC 33:III.1502.A.3	Emits less than 5 tpy of Sulfur dioxide
EQT354 and 355 1-92 and 2-92, Tank F-513 and F-514	Control of Emissions of Organic Compounds – Oil/Water Separation	Does not apply	LAC 33:III.2109	Not an affected emission source
EQT356 5061-09, RON/MON Octane Test Engines	NSPS, Subpart QQ, 40 CFR 60.690	Does not apply	40 CFR 60.692-3(d)	Complies with the requirements of NSPS, 40 CFR 60, Subpart Kb
	NESHAP, Subpart YY – National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards	Does not apply	40 CFR 63.1103(e)(iii)	Complies with the requirements of NESHAP, 40 CFR 63, Subpart CC
	Emission Standards for Sulfur Dioxide	Does not apply	LAC 33:III.1502.A.3	Emits less than 5 tpy of Sulfur dioxide
	NSPS, Subpart JJJJ – Standards of Performance for Stationary Spark ignition Internal Combustion Engines	Does not apply	40 CFR 60.4230(a)	Do not meet the definition of a Spark Ignition Internal Combustion Engine

The above table provides explanation for both the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Section X of this permit

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ID No:	Requirement	Status	Citation	Explanation
UNF12 H2P, Hydrogen Plant	Compliance Assurance Monitoring 40 CFR Part 64	Does not apply	40 CFR 64.42(a)(2)	No control device is used to comply with any standards or limits
ARE11 2-03, H2 Plant Process Wastewater Emissions	Control of Emissions of Organic Compounds – Waste Gas Disposal	Exempt	LAC 33:III.2115.H.c	VOC emissions are less than 100 lbs for any 24 hour period
EQT52, EQT53 and EQT54 1016-95, 1096-95, and 1098-95 Fixed Roof Tanks	Control of Emissions of Organic Compounds – Storage of Volatile Organic Compounds	Does not apply	LAC 33:III.2103.A	Does not store material having a maximum true vapor pressure 1.5 psia or greater
	NSPS, Subpart K NSPS, Subpart Ka NSPS, Subpart Kb	Does not apply	40 CFR 60.110 40 CFR 60.110a 40 CFR 60.110b	Based on date of construction Based on Date of construction Based on capacity and/or vapor pressure
	NESHAP, Subpart CC – Petroleum Refineries, Storage Vessel Provisions	Does not apply	40 CFR 63.640(g)(2)	Does not contain hazardous air pollutants listed in Table 1
EQT55 H2 Plant Heater F- 45A/B	Comprehensive Toxic Air Pollutant Emission Control Program – State Only	Exempt	LAC 33:III.5105.B.3.c	Sources fire gas streams having greater than 7000 BTU/lb heating value and generated onsite
RLP3 and RLP4 Sulfinol Treatment Vent	Control of Emissions of Organic Compounds – Waste Gas Disposal	Exempt	LAC 33:III.2115.H.c	VOC emissions are less than 100 lbs for any 24 hour period
The above table provides explanation for both the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Section X of this permit				

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IX. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

STATEMENT OF BASIS

**Norco Refinery
Motiva Enterprises LLC
Logistics II
Norco, St. Charles Parish, Louisiana
Agency Interest Number: 1406
Activity Number: PER20090010
Draft Permits 2912-V2**

RACT – Refinery Maximum Achievable Control Technology

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.